



**METHOD TO EVALUATE SEGREGATION
IN HOT MIX ASPHALT PAVEMENT
USING A NUCLEAR DENSITY GAUGE**

SCOPE

This test method covers a procedure to evaluate segregation in hot-mix asphalt pavement.

The procedure is supplemental to the visual determination specified in 2303.03 and may be used to aid in determining segregation quantity and severity.

APPARATUS

Nuclear Gauge: CPN Model MC-1A, Troxler 3400, or Humboldt 5001

PROCEDURE

1. Visually select the areas where segregation is suspected. A minimum of three areas must be selected.
2. Take four nuclear density readings (back scatter mode, one minute count period), and convert to unit weights at each of the areas selected. Calculate the average density.
3. Select a non-segregated area near each segregated area tested.
4. Repeat step (b) for each non-segregated area.
5. Calculate the average density of each segregated area expressed as a percent of the average density for the respective non-segregated area.

REPORT

Report details of locations and nuclear density results for both segregated and companion non-segregated areas and the average density of each segregated area expressed as a percent of each non-segregated area.

EVALUATION

Segregation shall be evaluated and classified in accordance with the following table:

	<u>Significant</u>	<u>Severe</u>
Avg. Unit Weight, % (Segregated/Non-segregated)	98.0-95.1	95.0 and less

Refer to Construction Manual 2.53g, "Segregation in Hot Mix Asphalt Pavement," for price adjustment when segregation is significant or severe.